

BOOK REVIEWS

ANN FOWLER RHOADS and TIMOTHY A. BLOCK (illustrations by A. ANISKO). 2007. **The Plants of Pennsylvania: An Illustrated Manual (ed. 2)**. (ISBN 978-0-8122-4003-0, hbk.). Univ. of Pennsylvania Press, 3905 Spruce Street, Philadelphia, PA 19104-4011, U.S.A. (**Orders:** Univ. Penn. Press Warehouse, PO Box 5030, Baltimore, MD 21211, U.S.A.; custser@pobox.upenn.edu; 800-537-5487; 410-516-6998 fax). \$69.95, 1088 pp., 2,645 line drawings, 4 maps, 7" × 10".

In "adding another layer of information for the student of plant classification, ... we have replaced the alphabetical arrangement of families and genera employed in the first edition with family and genus sequences that best reflect our current understanding of phylogenetic relationships within the vascular plants. ... We drew heavily on the Flora of North America (published volumes and website) and the work of the Angiosperm Phylogeny Group ... and many of the references cited therein in arriving at the [order] for the second edition. The text *Plant Systematics: A Phylogenetic Approach, Second Edition*, by Judd et al. (2002) was also an important source." An exceptional value for 1088 pages, identifying nearly 3400 species, and including numerous additions to the flora beyond the first edition of 2000.

WU ZHENGYI, PETER H. RAVEN, and HONG DEYUAN (eds.). 2007. **Flora of China, Vol. 13. Clusiaceae through Araliaceae**. (ISBN-Vol. 13: 978-1-930723-59-7, hbk.). Science Press (Beijing) and Missouri Botanical Garden Press (St. Louis), P.O. Box 299, Saint Louis, MO 63166-0299, U.S.A. (**Orders:** www.mbgpress.org, orders@mbgpress.org, 314-577-9547, 314-577-9594 fax). \$125.00, 548 pp., 8 3/4" × 11 1/4".

This is "the 13th of a 25-volume work. It includes 33 families, 151 genera, and 1288 species, among which 11 genera and 649 species (50%) are endemic to China, and three families, 14 genera, and 76 species are introduced to China." Alangiaceae, Ancistrocladaceae, Araliaceae, Begoniaceae, Bixaceae, Cactaceae, Caricaceae, Cistaceae, Clusiaceae, Combretaceae, Crypteroniaceae, Cynomoriaceae, Dipterocarpaceae, Elaeagnaceae, Elatinaceae, Flacourtiaceae, Frankeniaceae, Haloragaceae, Hippuridaceae, Lecythidaceae, Lythraceae, Melastomataceae, Myrtaceae, Nyssaceae, Onagraceae, Passifloraceae, Rhizophoraceae, Stachyuraceae, Tamaricaceae, Tetramelaceae, Thymelaeaceae, Trapaceae, Violaceae. Chinese and American authors collaborate.

WALTER S. JUDD, CHRISTOPHER S. CAMPBELL, ELIZABETH A. KELLOGG, PETER F. STEVENS, and MICHAEL J. DONOGHUE. 2007. **Plant Systematics: A Phylogenetic Approach (ed. 3)**. (ISBN 978-0-87893-407-2, hbk.). Sinauer Associates, Inc. 23 Plumtree Road Sunderland, MA 01375. (**Orders:** orders@sinauer.com, publish@sinauer.com, www.sinauer.com). \$94.95, 620 pp., ca. 325 illustrations, 25 color plates, 8 1/2" × 11".

This justifiably much-used book is noted to be "appropriate for any course devoted to the systematics of angiosperms or vascular plants and, secondarily, for local flora courses. The text assumes no prerequisites other than introductory botany or biology." New to the 3rd edition (beyond 2002 2nd ed.): "color throughout the book, including more than two dozen plates illustrating morphological variation in the vascular plants; new coverage of maximum likelihood and Bayesian methods; extensively revised treatments of 17 families that have undergone significant changes in circumscription; updates to all chapters and to the many cladograms, taking into account recent taxonomic methods and hypotheses." An accompanying CD contains over 3,100 color photographs depicting a wide variety of plants from over 185 families and over 1900 species. Many species are represented by multiple photographs showing different views of the plant, its flowers, its fruits, and its habit. Also on the CD are an extensive glossary of plant terminology (with links to photos) and three contrasting arrangements of the families covered in the text, according to the APG, Cronquist, and Thorne.

Contents in brief, by chapters: The Science of Plant Systematics; Methods and Principles of Biological Systematics; Classification and Systems in Flowering Plants-Historical Background; Taxonomic Evidence-Structural and Biochemical Characters; Molecular Systematics; The Evolution of Plant Diversity; An Overview of Green Plant Phylogeny; Lycophytes, Ferns, and Gymnosperms; Phylogenetic Relationships of Angiosperms. Two appendices: Botanical Nomenclature; Specimen Preparation and Identification.